

This is the second draft of this ordinance. The first draft was released on October 3, 2013. This second draft includes some revisions based on the feedback received on the first draft. Revisions from the first draft are shown in track changes with strikethrough for deleted items and underline for added items. This draft ordinance is intended to provide baseline standards for renewable energy projects. Where a discretionary permit is required, project conditions and/or mitigation measures will be required to address site specific needs.

Please send your questions and comments regarding this draft ordinance via email or postal mail to:

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Comments on this draft are due June 4, 2014.

**ORDINANCE NO. \_\_\_\_\_**

An ordinance amending Title 22 – Planning and Zoning – of the Los Angeles County Code related to the establishment of regulations for small-scale renewable energy systems, utility-scale renewable energy facilities, and temporary meteorological towers.

**SECTION 1.** Section 22.08.040, D is hereby amended to add a definition to read as follows: -- “Decommissioning” means the removal of a use from service, which includes safe storage, dismantling, disposal, recycling, removal of concrete pads, and or site restoration.

**SECTION 2.** Section 22.08.070, G is hereby amended to add a definition to read as follows:

-- “Guy wires” means wires or cables used to support a wind tower as defined by Section 22.08.230, or other structures that require the use of such wires or cables for support.

**SECTION 3.** Section 22.08.190, S, is hereby amended to add definitions to read as follows:

-- “Small-scale solar energy system” means a system where solar resources are used to generate energy primarily for on-site use. Such system may be affixed either to the ground or to a structure other than the system’s mechanical support structure, such as a building or carport. Such system does not provide for more than 150% of the on-site energy demand. Any energy generated by a solar energy system that exceeds the on-site energy demand may be used off-site.

-- “Small-scale wind energy system” means a system where wind resources are used to generate energy primarily for on-site use. Such system may be affixed to either the ground or to a structure other than the system’s mechanical support structure, such as a building or carport. Such system has a rated capacity of 50 kilowatts or fewer. Any energy generated by a wind energy system that exceeds the on-site energy demand may be used off-site.

-- “Solar array” means the mechanically integrated assembly of modules or panels with a support structure and foundation, tracker, and other components, as required to generate energy using solar resources.

**SECTION 4.** Section 22.08.210 U is hereby amended to add definitions to read as follows:

-- Utility-scale renewable energy facility, ground-mounted. “Ground-mounted utility-scale renewable energy facility” means a facility affixed to the ground where renewable resources are used to generate energy primarily for off-site use. This definition includes all on-site and off-site equipment and accessory structures related to the facility, including but not limited to solar collector arrays, wind turbines, mounting posts, substations, electrical infrastructure, transmission lines, operations and maintenance buildings, and other accessory structures.

-- Utility-scale renewable energy facility, structure-mounted. “Structure-mounted utility-scale renewable energy facility” means a facility affixed to a structure that is separate from the facility’s mechanical support structure, such as a building or carport, where renewable resources are used to generate energy primarily for off-site use. This definition includes all on-site and off-site equipment and accessory structures

related to the facility, including but not limited to solar collector arrays, wind turbines, mounting posts, substations, electrical infrastructure, transmission lines, operations and maintenance buildings, and other accessory structures.

**SECTION 5.** Section 22.08.230.W is hereby amended to add a definition to read as follows:

-- “Wind tower” means the vertical component, including blades if any, of a small-scale wind energy system, a utility-scale renewable energy facility using wind resources, or a temporary meteorological tower that elevates the wind turbine generator and attached blades above the ground.

**SECTION 6.** Part 15 of Chapter 22.52 is hereby repealed in its entirety.

**SECTION 7.** Part 15 of Chapter 22.52 is hereby added to read as follows:

**PART 15**  
**RENEWABLE ENERGY**

**SECTIONS:**

- 22.52.1600 Purpose.
- 22.52.1610 Applicability.
- 22.52.1620 Permit Requirements.
- 22.52.1630 Standards for Small-Scale Solar Energy Systems.
- 22.52.1640 Standards for Temporary Meteorological Towers.
- 22.52.1650 Standards for Small-Scale Wind Energy Systems.
- 22.52.1660 Standards for Ground-Mounted Utility-Scale Renewable Energy Facilities.
- 22.52.1670 Standards for Structure-Mounted Utility-Scale Renewable Energy Facilities.
- 22.52.1680 Modifications.

**22.52.1600 Purpose.**

This Part 15 establishes regulations and permit requirements that support and facilitate the development of small-scale renewable energy systems, utility-scale renewable energy facilities, and temporary meteorological towers in a manner that minimizes potential safety hazards and impacts to the environment.

**22.52.1610 Applicability.**

A. The provisions of this Part 15 shall apply to the development of any small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower on private property. The provisions serve as the basis for development standards applicable to other renewable energy technologies, including but not limited to biomass, geothermal, hydrogen, hydropower, ocean, and any future viable renewable energy technology.

B. Applicability of zone and supplemental district regulations. All provisions of the zone and any supplemental district in which a small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower is located shall also apply. Where a provision of the zone or supplemental district regulates the same matter as this Part 15, whichever provision is more restrictive shall apply.

C. Exemption. The provisions of this Part 15 shall not apply to any small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower approved prior to the effective date of the ordinance establishing this Part 15.

D. Subsequent application. The provisions of this Part 15 shall apply to:

1. Any subsequent application that would increase the physical size, height, or footprint of a previously approved small-scale renewable energy system, utility-scale renewable energy facility, or temporary meteorological tower; and
2. Any subsequent application that would change the type of equipment used by the previously approved small-scale renewable energy system,

utility-scale renewable energy facility, or temporary meteorological tower, except for replacement of equipment for maintenance purposes.

**22.52.1620 Permit Requirements.**

A. Property may be used for the following uses, as set forth in Table 22.52.1620-A:

<b>TABLE 22.52.1620-A: RENEWABLE ENERGY PERMIT REQUIREMENTS*</b>							
Permit Required By Zone P = Permitted Zoning Conformance Review = ZCR SPR = Site Plan Review, Ministerial MCUP = Minor Conditional Use Permit CUP = Conditional Use Permit N/A = Prohibited							
	A-1	A-2, A-2-H	OS, W	R-A, R-1, R-2, R-3, R-4	C-H, C-1, C-2 C-3, C-M, C-R, R-R	M-1, M-1.5, M-2, M-2.5, D-2	
<b>Small-Scale Renewable Energy System</b>							
Small-Scale Solar Energy System							
• Structure-mounted	P	P	P	P	P	P	
• Ground-mounted	ZCR	ZCR	ZCR	ZCR	ZCR	ZCR	
Small-Scale Wind Energy System	MCUP	MCUP	N/A	MCUP	MCUP	MCUP	
<b>Utility-Scale Renewable Energy Facility</b>							
Utility-Scale Renewable Energy Facility, Ground-mounted	N/A	CUP	N/A	N/A	CUP	CUP	
Utility-Scale Renewable Energy Facility, Structure-mounted	SPR	SPR	N/A	SPR	SPR	SPR	
<b>Temporary Meteorological Tower</b>	MCUP	MCUP	N/A	MCUP	MCUP	MCUP	

B. Aviation Review. For any use subject to a minor conditional use permit or conditional use permit pursuant to Table 22.52.1620-A above, and located within the Military Installations and Operations Areas (MIOAs) as identified by the General Plan:

1. Consultation. Aviation-related agencies shall be consulted for review of the proposed project for any potential impacts to ensure the safety of

residents and continued viability of military training and testing operations. The Department shall distribute copies of the proposed site plan, elevation plan, and location map to the aviation-related agencies and shall request comments within a minimum 30-day period. Aviation-related agencies to be consulted include, but are not limited to, the Federal Aviation Administration (FAA), United States Navy, Edwards Air Force Base, Air Force Plant 42, United States Forest Service, California Department of Transportation Division of Aeronautics, County Department of Public Works – Aviation Division, County Forester and Fire Warden, and County Sheriff. The consultation review shall request consideration of the following:

a. Uses that produce electromagnetic and frequency spectrum interference, which could impact military operations;

b. Uses that release into the air any substances that may impair visibility such as steam, dust, or smoke;

c. Uses that produce light emissions that could interfere with pilot vision or be mistaken for airfield lighting such as glare or distracting lights;

d. Uses that physically obstruct any portion of the MIOA due to relative height above ground level.

2. Any comments received within the consultation period shall be considered by the Department and provided to the Hearing Officer.

C. Findings. In addition to the findings required under Part 1 of Chapter 22.56, the Hearing Officer shall not approve a minor conditional use permit or conditional use permit it finds that if the requested use penetrates the lower floor elevation of any MIOA, the military operator of the MIOA has determined that the



requested use is not detrimental to the function of the MIOA and would not pose a health or safety hazard to military personnel or the public.

**22.52.1630 Standards for Small-Scale Solar Energy Systems.**

A. Conformance with state requirements. A small-scale solar energy system shall be in conformance with the California Solar Rights Act (California Civil Code Section 714 et seq.).

B. Structure-mounted. The combined height of a structure and structure-mounted small-scale solar energy system shall not exceed the height limit of the zone by more than five feet.

**22.52.1640 Standards for Temporary Meteorological Towers.**

A. Access roads. All temporary and permanent ingress and egress points to the facility shall be designed and sited to the satisfaction of the Director of Public Works and the Fire Department, shall consider adequate spacing from intersections, and shall maintain adequate sight distances.

**B. Aviation safety.**

1. A safety light that meets FAA standards shall be required for any wind tower that exceeds an overall tower height of 200 feet measured from finished grade. A safety light may be required on shorter wind towers when deemed necessary by any aviation-related agency or the Department. No other lights shall be placed on the wind tower.

2. Wind towers of less than 200 feet measured from finished grade shall be marked with alternating bands of aviation orange and white paint, and high

visibility sleeves installed on the outer guys with high spherical marker balls of aviation orange color.

C. Climbing apparatus. All climbing apparatus shall be located at least 12 feet above the finished grade, and all wind towers shall be designed to prevent climbing within the first 12 feet of wind tower height from finished grade.

D. Colors. Except as otherwise required in this section, the colors used in the construction materials or finished surface shall be muted and visually compatible with surrounding development or environment.

E. Location. The minimum setback for a wind tower shall be as depicted in Table 22.52.1640-A – Setback Requirements for Temporary Meteorological Towers. The required distance shall also comply with any applicable fire setback requirements pursuant to California Public Resources Code Section 4290.

<b>TABLE 22.52.1640-A – SETBACK REQUIREMENTS FOR TEMPORARY METEOROLOGICAL TOWERS</b>	
Setback from	Minimum Distance
On-site <u>or Off-site</u> Residence or Habitable Structure	1.5 x system height
Public Road, Highway,	<u>As required by Department of Public Works to meet sight distance and minimum setback requirements from traveled lanes.</u>
Above Ground Transmission Line, Public Access Easement, or Public Trail	1.25 x system height
Property Line	1.25 x system height
<u>On-site or Off-site</u> Buildings Other Than a Residential Structure	1 x system height
Trees	As required by the Fire Department
Scenic Drives and Scenic Routes as identified	1,000 feet

in the General Plan or applicable Area or Community Plan	
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**F.** Maintenance. All equipment and facilities shall be maintained in an operational condition that poses no potential safety hazards. Maintenance shall include, but not be limited to, painting, regularly scheduled cleaning, mechanical and/or electrical repairs, structural repairs, and security measures.

**G.** Maximum number and separation.

1. More than one wind tower may be located on the same property if all of the location requirements and standards of this Part 15 are met for each facility. A maximum of two wind towers are permitted for each five gross acres of land; and

2. Wind towers must be separated from each other by the safe industry practice depicted in Figure 22.52.1640-A - Separation Standards for Temporary Meteorological Towers, below.

**FIGURE 22.52.1640-A – SEPARATION STANDARDS  
FOR TEMPORARY METEOROLOGICAL TOWERS**

**FIGURE 22.52.1640-A  
HERE**

**H.** Maximum wind tower height. The maximum wind tower height shall not exceed the height limit as depicted in Figure 22.52.1640-B - Height Standards for Temporary Meteorological Towers below:

1. 35 feet measured from the finished grade to the top of the blade in the vertical position for lots of less than one gross acre in size;
2. 65 feet measured from the finished grade to the top of the blade in the vertical position for lots from one gross acre to less than two gross acres in size;
- and
3. 85 feet measured from the finished grade to the top of the blade in the vertical position for lots two gross acres or greater in size.

**FIGURE 22.52.1640-B – HEIGHT STANDARDS FOR TEMPORARY  
METEOROLOGICAL TOWERS**

**FIGURE 22.52.1640-B  
HERE**

↓. Structure-mounted. The combined height of a structure and structure-mounted wind tower shall not exceed the height limit of the zone by more than five feet.

↓. Signs. One sign, limited to 18 inches in length and 12 inches in height, shall be posted at the base of each wind tower. The sign shall include a note of no trespassing, a warning of high voltage, and the phone number of the property owner to call in the event of an emergency.

**22.52.1650 Standards for Small-Scale Wind Energy Systems.** In addition to the standards required under Section 22.52.1640, the following standards shall apply to small-scale wind energy systems;

A. Automatic overspeed controls. A small-scale wind energy system shall be equipped with manual and automatic overspeed controls to limit the blade rotation speed to within the design limits of such system.

B. Blade clearance. No portion of a blade shall extend within 20 feet of the finished grade.

C. Guy wires. ~~Safety wires shall be installed on the turnbuckles on guy wires. Anchor points for any guy wires shall be located within the same property as the system, and located in such a manner so as not to be on or across any above-ground electric transmission or distribution lines; and~~

~~D. Noise. Noise from a small-scale wind energy system shall not exceed 60 dBA SEL (single event noise level), as measured at the closest neighboring inhabited dwelling.~~

~~E. Visual impact.~~

~~1. The highest point of a small-scale wind energy system shall be located at least 50 vertical feet and 50 horizontal feet from a significant ridgeline identified in the General Plan, in an applicable area or community plan, or within an applicable community standards district;~~

~~2. Any small-scale wind energy system placed within the viewshed of a Scenic Drive or Scenic Route identified in the General Plan or in an applicable area or community plan shall be assessed for its visual impacts, and appropriate conditions shall be applied relating to siting, buffers, and design of the system; and~~

~~3. Within the coastal zone, the placement of any small-scale wind energy system shall not obstruct public views of the ocean from a scenic element (i.e.,~~

significant ridgeline, scenic route, scenic area, scenic viewpoint) identified in the applicable local coastal program, unless specific provisions for such siting are provided for in the applicable local coastal program and coastal development permit or long-range development plan.

**22.52.1660 Standards for Ground-Mounted Utility-Scale Renewable Energy Facilities.**

A. Access roads. All temporary and permanent ingress and egress points to the ground-mounted utility-scale renewable energy facility shall be designed and sited to the satisfaction of Director of Public Works and the Fire Department, shall consider adequate spacing from intersections, and shall maintain adequate sight distances.

B. Aviation safety.

1. A ground-mounted utility-scale renewable energy facility shall not be located within the Runway Protection Zone of any airport, as depicted in the County's airport land use plans.

2. A ground-mounted utility-scale renewable energy facility shall not penetrate the imaginary surfaces (primary, approach, transitional, horizontal, and conical surfaces) as defined by the FAA Federal Aviation Regulations Part 77 to protect the use of navigable airspace.

3. A safety light that meets FAA standards shall be required for all wind towers that exceed a height of 200 feet. A safety light may be required on shorter wind towers when deemed necessary by any aviation-related agency. No other lights shall be placed on such wind towers.

C. Fencing. Except as otherwise required by Department of Public Works to maintain minimum corner sight distance:

1. Non-opaque fences may be permitted.
2. Fencing up to eight feet in height may be permitted, regardless of any other fencing standards.
3. Fencing shall not be located within 15 feet of a public right-of-way but may be located within the required setback area.
4. Existing drought-tolerant native or non-native vegetation approved by the staff biologist shall be retained, or new such vegetation shall be planted along fencing, unless determined infeasible or inappropriate by the Hearing Officer.

D. Lighting. Night-lighting, limited to that required for safety and security, shall be shielded and directed downward to avoid light trespass, and shall consist of:

1. Motion sensors for entry-lighting to the on-site equipment structures and buildings; and
2. Light-sensor or motion-sensor lighting for the main facility access gate, operations and maintenance building doorways, and any parking areas of facilities with operation and maintenance buildings.

E. Setbacks. Setbacks from the perimeter of the property line shall be:

1. 30 feet in agricultural zones; or
2. As provided in the base zone for all non-agricultural zones.

F. Signs. One ground-mounted or pole-mounted project identification sign may be located at each temporary and permanent ingress and egress point. Signs shall include owner information and emergency contact. No other signs shall be installed for

the facility other than safety, directional, and required warning signs as outlined in Part 10 of Section 22.52.

G. Site disturbance.

1. Existing vegetation may be mowed, but removal of existing vegetation root systems shall be prohibited to ensure dust control and minimal soil erosion, except where necessary for access roads, drainage, debris basins, inverter pads, or other County requirements.

2. The facility shall be designed to minimize erosion, sedimentation, or other impacts to the natural hydrology and drainage patterns of the site. Existing topography and watercourses shall be retained or restored to pre-existing conditions following construction and during operations, except for drainage features specifically designed to mitigate drainage impacts. A drainage plan shall be submitted at time of application that complies with all requirements showing the extent of drainage impacts, comply with the most recent County standards for addressing drainage impacts to the satisfaction of Department of Public Works, and obtain all agency approvals.

3. The facility shall be designed to minimize grading and amount of ground disturbance in order to control fugitive dust and preserve the natural topography. A site plan shall be submitted depicting the extent of grading and ground disturbance, and comply with all applicable standards for addressing grading and ground disturbance impacts. Grading involves any mechanical disturbance that removes the root system with the exception of access roads, drainage, debris basins, and inverter pads.

4. Fugitive dust emission shall be controlled by phased earthwork, site watering, use of clean gravel or composted wood chips not to exceed a depth of six



inches where applicable, application of non-toxic soil stabilizers, limiting public access on unpaved areas, posting private roadways with reduced speeds, and/or re-vegetation.

Use of other fugitive dust mitigation measures may be implemented if determined by Regional Planning and Public Works to be suitable methods to adequately control dust during construction, operations, and removal and restoration activities.

H. Transmission lines. On-site and off-site transmission lines shall be placed underground to the satisfaction of Department of Public Works and the Department, except where above-ground crossings are otherwise required (such as over the California Aqueduct). A franchise agreement shall be required for distribution/transmission facilities within the public right of way. Disturbed areas shall comply with Section 22.52.1660.G to ensure dust control and minimal soil erosion.

I. Visual impact.

1. The highest point of a utility-scale renewable energy facility shall be located at least 50 vertical feet and 50 horizontal feet from a significant ridgeline identified in the General Plan, in an applicable area or community plan, or in an applicable community standards district;

2. Any utility-scale renewable energy facility that is placed within the viewshed of a Scenic Drive identified in the General Plan or in an applicable Area Plan or Community Plan shall be analyzed for its visual impacts, and appropriate conditions relating to siting, buffering, height, and design of the facility may be imposed to minimize significant effects on the viewshed; and

3. Within the Coastal Zone, the placement of any utility-scale renewable energy facility shall not obstruct public views of the ocean from a scenic

element (i.e., significant ridgeline, scenic route, scenic area, scenic viewpoint) identified in the applicable local coastal plan unless specific provisions for such siting are provided for in the applicable local coastal plan and coastal development permit or long-range development plan.

J. Water quality protection. Measures to protect groundwater and surface water from waste discharge shall be incorporated into the project design, as appropriate, and shall meet the requirements of the Regional Water Quality Control Board.

K. Blade clearance. No portion of a utility-scale renewable energy facility blade utilizing wind resources shall extend within 30 feet from the finished grade.

L. Impacts to birds and bats. All utility-scale renewable energy facilities utilizing wind resources shall be designed, constructed, and operated pursuant to the *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development* published by the California Energy Commission and conditions of approval may be imposed by the Hearing Officer, consistent with these guidelines, to reduce significant impacts to birds and bats.

M. Location. The minimum distance and safe clearances for a utility-scale renewable energy facility utilizing wind resources shall be as depicted in Table 22.52.1660-A – Setback Requirements for Ground-Mounted Utility-Scale Renewable Energy Facility Using Wind Resources. The required distance shall also comply with any applicable fire setback requirements pursuant to the California Public Resources Code Section 4290.

<b>TABLE 22.52.1660-A – SETBACK REQUIREMENTS FOR GROUND-MOUNTED UTILITY-SCALE RENEWABLE ENERGY</b>
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FACILITY USING WIND RESOURCES	
Setback from	Minimum Distance
On-site <u>or Off-site</u> Residence <u>ce</u> <u>or</u> Habitable Structure	2 x facility height
Public Road <u>or</u> Highway	<u>As required by the Department of Public Works to meet sight distance and minimum setback requirements from traveled lanes.</u>
Above Ground Transmission Line, Public Access Easement, or Public Trail	2 x facility height
Property Line	2 x facility height
<u>On-site or Off-site</u> Buildings Other Than a Residential Structure	1 x facility height
Trees	As required by the Fire Department
Scenic Drives and Scenic Routes as identified in the General Plan or in an applicable area or community plan	2 x facility height
<u>Railway</u>	<u>2 x facility height</u>

N. Maximum height. Wind tower height shall not exceed 500 feet above finished grade.

O. Decommissioning. In the event that any portion of a utility-scale renewable energy facility is not in operational condition for a consecutive period of six months, ceased operation, or the permit for the use has expired, operations for that use shall be deemed to have been discontinued. The Department shall send written notice to the permittee advising of the discontinued use and require that the use be removed from the site within the time period specified below:

1. Within six months after the written notice of discontinued use is sent to the permittee, decommissioning of the use shall commence according to the decommissioning plan.

2. Within the six month period specified by subsection 1 above, the permittee may provide the Department with a written request and justification for an extension of up to six months to resume operations of the system, facility, or portions thereof. The Director may approve one six month extension.

**22.52.1670 Standards for Structure-Mounted Utility-Scale Renewable Energy Facilities**

A. Setbacks. Setbacks from the perimeter of the roof shall be:

1. Three feet on residential buildings; or
2. Four feet on non-residential buildings.

B. Accessory structures. Accessory structures constructed for the purposes of operating and maintaining the utility-scale renewable energy facility must meet all applicable development standards of the zone.

**22.52.1680 Modifications**

A. Where a site plan review is required pursuant to Section 22.52.1620, a conditional use permit in compliance with Part 1 of Chapter 22.56, is required for any modification to the applicable standards in this Part 15, except as otherwise noted herein. In addition to those required by Section 22.52.1620.B, the applicant for such conditional use permit shall substantiate the following findings:

1. Due to topographic or physical features of the site, strict compliance with all of the required standards would substantially and unreasonably interfere with the establishment of the proposed development on the subject property; and

2. The requested modification(s) would not be contrary to the purpose of this Part 15.

B. Where a minor conditional use permit or conditional use permit is required pursuant to Section 22.52.1620, any modification of the applicable standards in this Part 15 may be requested as part of the minor conditional use permit and conditional use permit except as otherwise noted herein. The applicant for such minor conditional use permit or conditional use permit shall substantiate the findings provided in subsection A above in addition to those required by Section 22.52.1620.B and Part 1 of Chapter 22.56.

C. A wind tower greater than 500 feet in height requires approval of a variance pursuant to Part 2 of Chapter 22.56.